Exports of Petroleum Products
1988

National Energy Board
Staff Report

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Foreword

The Western Accord, an agreement reached by the Federal government and the governments of British Columbia, Alberta and Saskatchewan in March of 1985, deregulated crude oil and petroleum product prices. Under this agreement, the Board, among other things, monitors oil markets and reports to the Minister of Energy, Mines and Resources on oil export matters.

The relevant information is gathered monthly and analyzed by the Board to ensure that markets are working in the manner envisaged in the Western Accord. In response to requests from the industry, the Board also prepares on a yearly basis, an overview of the export activities based on the data collected. This report is the fourth such overview on petroleum product exports and covers the calendar year 1988. A review of petroleum product imports is included in this report in order to put exports in the context of the overall trade. The Board also issues a report on exports of crude oil.

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Highlights

Since deregulation in 1985, international trade in petroleum products has performed an increasingly important function in facilitating a smoothly operating market in Canada. In 1988, this circumstance continued.

Last year, world oil prices softened slightly in comparison to 1987. Canada continued to be a net exporter of petroleum products. The following points are the highlights of 1988 with respect to exports of petroleum products.

Volumes

The United States continues to be Canada's largest market for petroleum products. Exporters on the west coast, however, view the Far East as an ongoing important market (Page 1).

Exports of petroleum products in 1988 averaged 32.0 thousand cubic metres per day, an increase of 44 percent from the 1987 level of 22.2 thousand cubic metres per day. This is the largest volume exported this decade. The main reason for the large increase reflects a full year of production from the refinery in Come By Chance, Newfoundland (Page 3).

Each product with the exception of aviation turbine fuel registered an increase in export volumes (Page 4).

Prices

Export prices for light petroleum products remained relatively close to spot prices in the United States. Prices for light petroleum products along the United States East Coast were such that companies exported product from British Columbia in the latter part of 1988. The heavy fuel oil export price was slightly above the United States East Coast spot price in most instances (Page 8).

The price of motor gasoline and furnace oil exported from Ontario was generally below Toronto rack and bulk contract prices (Page 10).

Exports of Petroleum Products in 1988

Introduction

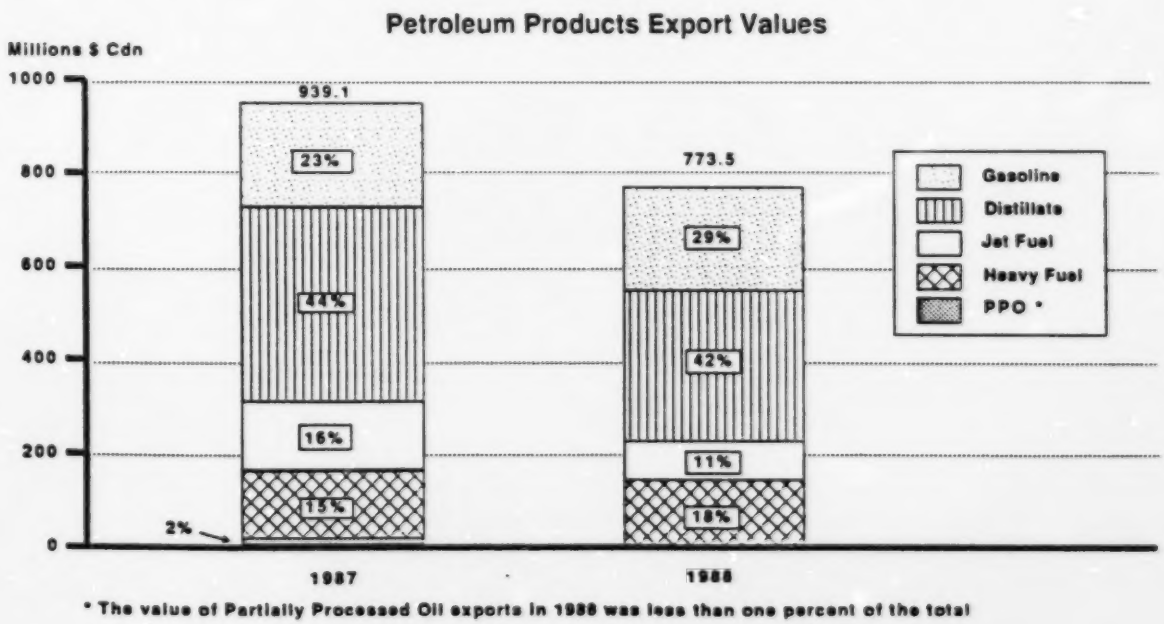
The petroleum products that require an export order from the Board are motor gasoline, middle distillate, aviation turbine fuel, heavy fuel oil and partially processed oil. The export of all other petroleum products and the import of any product can occur without authorization. This report will only address those products listed above.

Canada's International Trade in Petroleum Products

In 1988, exports of petroleum products rose to 32.0 thousand cubic metres a day from the 1987 level of 22.2 thousand cubic metres per day. Revenues decreased to $773.5 from $939.1 million (Figure 1) excluding the value of products which Canadian refiners produced under processing agreements with foreign oil companies. This decrease reflects an overall reduction in world oil prices and a six percent decline in exports of lighter petroleum products, excluding those under processing agreements.

Refiners produce a wide range of products in order to meet demand for one or more specific products (i.e. gasoline). Canadian refiners access export markets whenever surplus product and/or spare refining capacity becomes available. The United States historically receives the majority of Canada's oil exports; in 1988, this amounted to 98 percent. Canada is the sole supplier to the islands of St. Pierre et Miquelon and from time to time, Canadian exporters have also turned to offshore markets in the Pacific Rim when the economics were attractive. While shipments were made to Japan, Korea and Taiwan in 1987, Canada's only Far East market in 1988 was Japan.

Figure 1



* The value of Partially Processed Oil exports in 1988 was less than one percent of the total

Of particular importance in causing product exports to reach a new high in 1988 was the full year of production from the Come By Chance refinery in Newfoundland, built in the early 1970's primarily to serve export markets on the United States eastern seaboard. It was this area that received the largest volume of Canadian exports followed by the Great Lakes region, the Northeast, Montana and the west coast, respectively (Figure 2).

Export Volumes

Refinery throughput during 1988 averaged 250.2 thousand cubic metres per day, up six percent or 14.3 thousand cubic metres per day; for the most part, the result of higher processing in the Atlantic. Product exports accounted for almost 13 percent of the total refinery throughput versus 9 percent in 1987. On a national basis, refineries operated at about 85 percent of capacity, two percent higher than 1987.

Exports from the Atlantic Provinces represented 42 percent of that region's production; by far the highest in Canada. The next highest was British Columbia with 12 percent of its throughput being exported. Exports from the other regions ranged from four to six percent of refinery throughput.

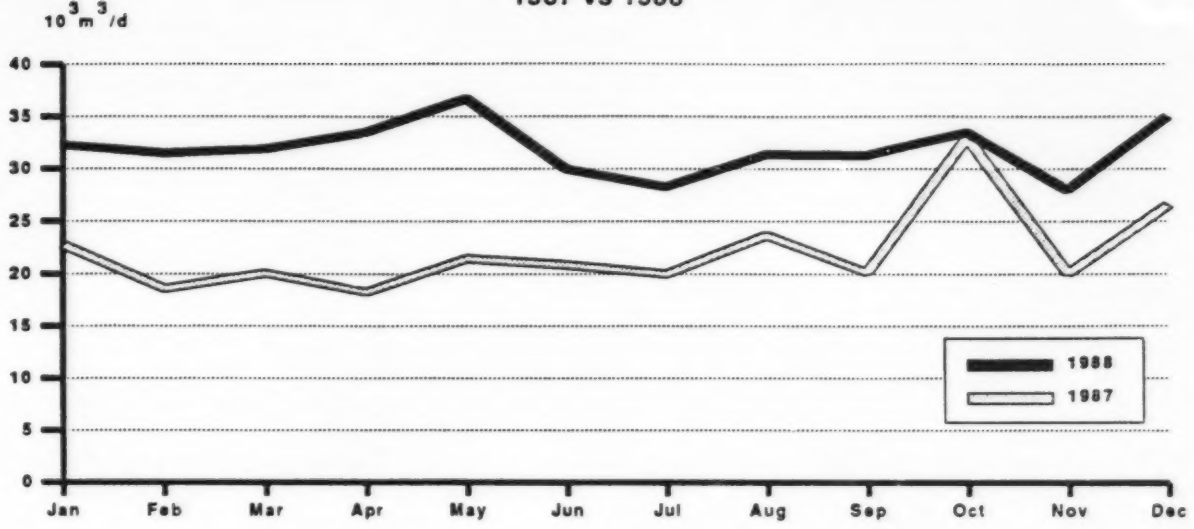
In 1988, exports of petroleum products averaged 32.0 thousand cubic metres a day, a 44 percent increase from the 1987 level of 22.2 thousand cubic metres per day.

Figure 2
Origin and Destination of Product Exports 1988/(1987)
$10^3 m^3/d$

Figure 3

Monthly Exports of Petroleum Products

1987 vs 1988



In 1987 (Figure 3), exports started the year on a high note because surplus products in British Columbia were shipped to the Far East and Japan. Significant quantities of middle distillate and motor gasoline from Ontario and the Prairies, respectively, also played an important role in boosting export levels in January. Exports did not fluctuate greatly during the February to July period. In August, however, exports rose to about 23.7 thousand cubic metres per day as a result of several cargoes of light product from eastern Canada to the United States East Coast.

In October 1987, deliveries averaged 33.0 thousand cubic metres a day; the highest level of exports in 1987. The startup of the Come By Chance refinery in Newfoundland during September and subsequent exports in October had a significant impact on the total volume shipped in that month. In addition, there were several cargoes of light product shipped from British Columbia to the United States West Coast and the Pacific Rim. A few cargoes of middle distillate and heavy fuel oil were also exported from the Atlantic Provinces and Quebec. In November, however, exports declined because of an overall decrease in shipments from the Atlantic Provinces.

As mentioned above, an important factor influencing exports in 1988 was the start-up of the Come By Chance refinery which is primarily an export refinery. Excluding processing agreements, exports in 1987 and 1988 equalled 15.3 and 14.7 thousand cubic metres a day, respectively.

In 1988, exports peaked in May at 36.7 thousand cubic metres per day because of significant volumes shipped under processing agreements. Subsequently, shipments declined due to low inventories in some regions and poor economics in others. In August, attractive margins on the United States West Coast sparked an increase in gasoline exports from British Columbia along with a surge in heavy fuel oil shipments from Ontario to New York and Michigan.

A 50 percent decline in distillate movements and no exports of partially processed oil from the Atlantic led the way in reducing November's export volumes to a level of 28.0 thousand cubic metres per day. In December, shipments rose to 35.0 thousand cubic metres a day because of the normal winter demand for distillates and higher than normal exports of heavy fuel oil from the Atlantic region.

There were some interesting shipments in 1988. For the first time in many years a significant amount of heavy fuel oil was shipped from British Columbia to the United States West Coast. Attractive prices along the United States East Coast in the fourth quarter resulted in a few cargoes of middle distillate and motor gasoline being shipped from British Columbia.

Figure 4

Exports of Petroleum Products
1987 versus 1988

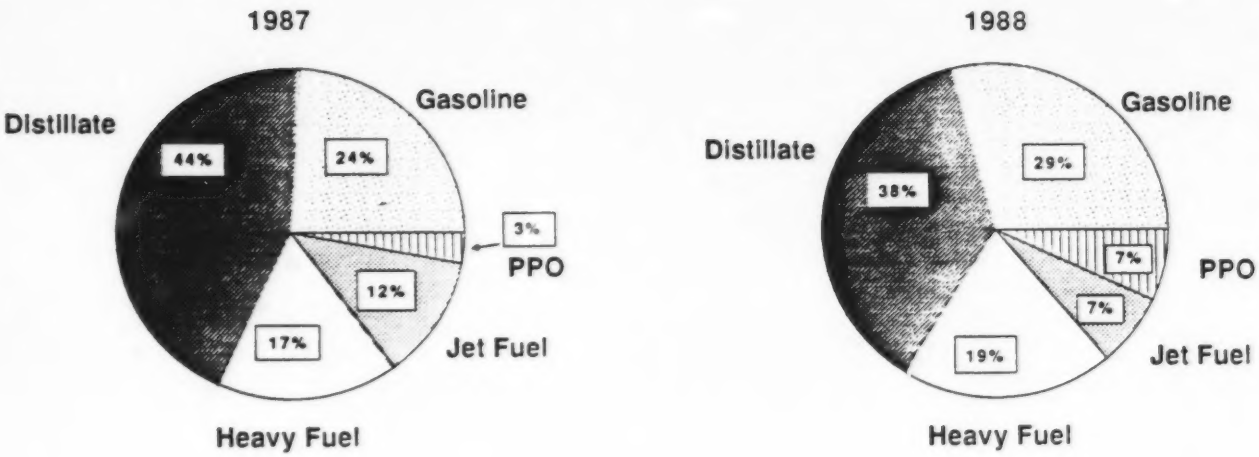


Figure 4 sets out the proportion of exports of each product during 1987 in comparison to 1988.

Exports by Region

Table 1 summarizes product exports by region for 1987 and 1988.

Table 1
(Thousands of Cubic Metres per Day)

	1987	1988	Difference
Atlantic	8.0	19.2	11.2
Quebec	2.4	2.1	(0.3)
Ontario	5.8	4.8	(1.0)
Prairies	2.2	2.5	0.3
British Columbia	3.8	3.4	(0.4)
Total	**22.2**	**32.0**	**9.8**

The Atlantic Provinces dominated exports in 1988 with shipments equalling 19.2 thousand cubic metres a day or 60 percent of the total; Ontario was second with 4.8 thousand cubic metres a day (15 percent). In 1988, however, Ontario's exports declined by 17 percent from 1987 levels mainly because of increased domestic demand for middle distillate (diesel). Exports from British Columbia were 3.4 thousand cubic metres a day or 11 percent of the total; this was a drop of 10 percent below 1987. Increased domestic demand for jet fuel was the primary reason for the decline. Attractive prices in Montana and North Dakota enabled companies to increase exports of gasoline and middle distillate from the Prairies. A 27 percent decline in exports of middle distillate during 1988 had a significant impact on the Quebec volumes.

Appendix I provides a breakdown of exports by region and product type for the last two years.

Exporters of Petroleum Products

In 1988, 35 companies exported petroleum products compared to 40 companies in 1987. Newfoundland Processing was the largest exporter in 1988 with 32 percent of the total volume which reflects a full year of processing compared to only a short period in 1987. Irving and Imperial followed with 27 and 13 percent, respectively (Table 2).

Refiners shipped 91 percent of all the product exported in 1988 compared to 85 percent in the previous year. Every refiner, with the exception of Parkland, exported product. Twelve refiners were in the top 15 exporter list.

Although Olco's exports declined marginally in 1988, it fell two positions to seventh with three percent of the total volume exported in 1988. In 1987, three independents that made the list, Nor-Sphere, 300 Group and Comtrade were replaced in 1988 by Texaco, Ultramar and another independent, Noco Energy Corp.

Ontario continues to have the largest number of exporting companies and they are moving primarily middle distillate. Many of these companies are independents which also engage in importing products into Ontario when price differentials make the reverse flow of trade profitable.

Table 2
Top 15 Exporters
10^3m^3

1987		1988	
Irving Oil Limited	2 485.2	Newfoundland Processing Ltd.	3 689.4
Imperial Oil Limited	1 247.5	Irving Oil Limited	3 178.9
Shell Canada Products Ltd.	1 023.0	Imperial Oil Limited	1 517.4
Petro-Canada Products Inc.	592.3	Shell Canada Products Ltd.	567.9
Olco Petroleum Group Inc.	407.9	Petro-Canada Products Ltd.	486.0
Sunoco Inc.	346.7	Petrosar Limited	401.4
Newfoundland Processing Ltd.	317.6	Olco Petroleum Group Inc.	398.2
Petrosar Limited	273.5	Turbo Resources Limited	264.1
Universal Terminals Ltd.	255.5	Universal Terminals Ltd.	211.8
Turbo Resources Limited	234.0	Noco Energy Corp.	156.9
Chevron Canada Ltd.	155.0	Sunoco Inc.	151.3
Consumers' Cooperative Refineries Limited	138.7	Texaco Canada Inc.	90.8
Nor-Sphere Inc.	116.1	Chevron Canada Ltd.	80.0
The 300 Group	73.4	Consumers' Cooperative Refineries Limited	75.3
Comtrade Petroleum Inc.	72.6	Ultramar Canada Inc.	69.4
Others (25)	368.7	Others (20)	362.5
	8 107.7		11 701.3

Import Volumes

Imports of petroleum products in 1988 amounted to 18.2 thousand cubic metres a day compared to 16.5 thousand cubic metres per day during 1987 (Appendix I). Generally, refiners will only import products to balance supplies. For example, gasoline is brought in during the summer and low pour furnace oil during the winter. Since heavy fuel oil is considered a by-product of the refining process, refiners will import rather than operate refineries to produce heavy fuel oil. Independents will import if they cannot obtain sufficient supplies at an adequate price from a refiner.

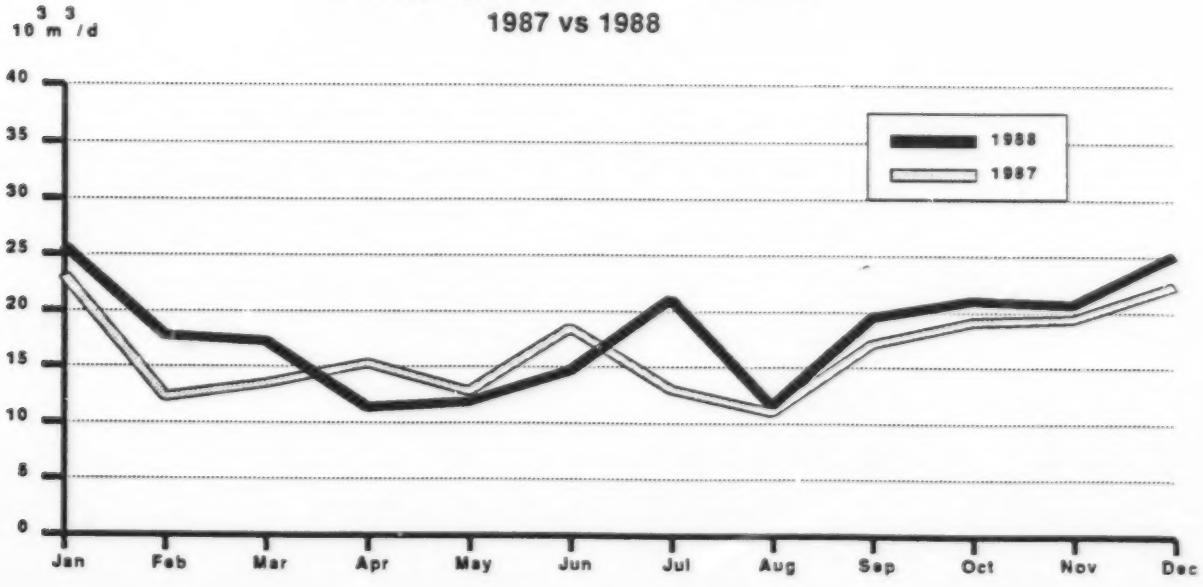
Canadian importers continued obtaining supplies from numerous countries in 1988 as indicated in the following list.

Algeria	Italy	Turkey
Belgium	Netherlands	United Kingdom
Brazil	Spain	United States
France	Trinidad	Venezuela

Import levels fluctuate significantly from month to month but on a year over year comparison, the trends are essentially the same as indicated in the following graph. Refiners and independents will import to balance operations, which was the case in July 1988, or when price differentials make imports economical (Figure 5).

Figure 5

Monthly Imports of Petroleum Products
1987 vs 1988



It is interesting to note that in 1988, imports of light petroleum products (gasoline, distillate and aviation fuel) decreased by seven percent while heavy fuel oil imports increased by 43 percent (930 thousand cubic metres) in comparison with 1987. This large increase is primarily the result of pulp and paper mills in Quebec switching from electricity to heavy fuel oil and the high demand for thermal electricity generation in the Atlantic. In March 1988, Hydro Quebec's surplus electricity and dual energy program was partially phased out and in November it was completely eliminated. As a result, a number of companies operating in Quebec appear to have reverted to heavy fuel oil or natural gas.

Figure 6 illustrates the proportions of imports of each product during 1987 in comparison to 1988. Heavy fuel oil continued its dominance in 1988 with 47 percent followed by motor gasoline and middle distillate with 19 and 18 percent, respectively.

Imports by Region

Table 3 summarizes product imports by region for 1987 and 1988.

Table 3
(Thousands of Cubic Metres per Day)

	1987	1988	Difference
Atlantic	6.6	7.4	0.8
Quebec	8.1	8.2	0.1
Ontario	1.0	1.3	0.3
Prairies	-	-	-
British Columbia	0.8	1.3	0.5
Total	16.5	18.2	1.7

In 1988, the province of Quebec again had the greatest need for imported petroleum products, particularly light products. However, demand for imported heavy fuel oil in Quebec increased dramatically for reasons mentioned previously. In the Atlantic, increased demand for heavy fuel oil and jet fuel also resulted in higher import levels during 1988. Imports into British Columbia rose by 72 percent because of attractive prices for alternative supplies of light products refined in the United States northwest. In addition, the demand for pulp and paper products made in British Columbia resulted in companies seeking additional offshore supplies of heavy fuel oil. In Ontario, imports of each product were up marginally from 1987.

Appendix I provides a breakdown of imports by region and product type for the past two years.

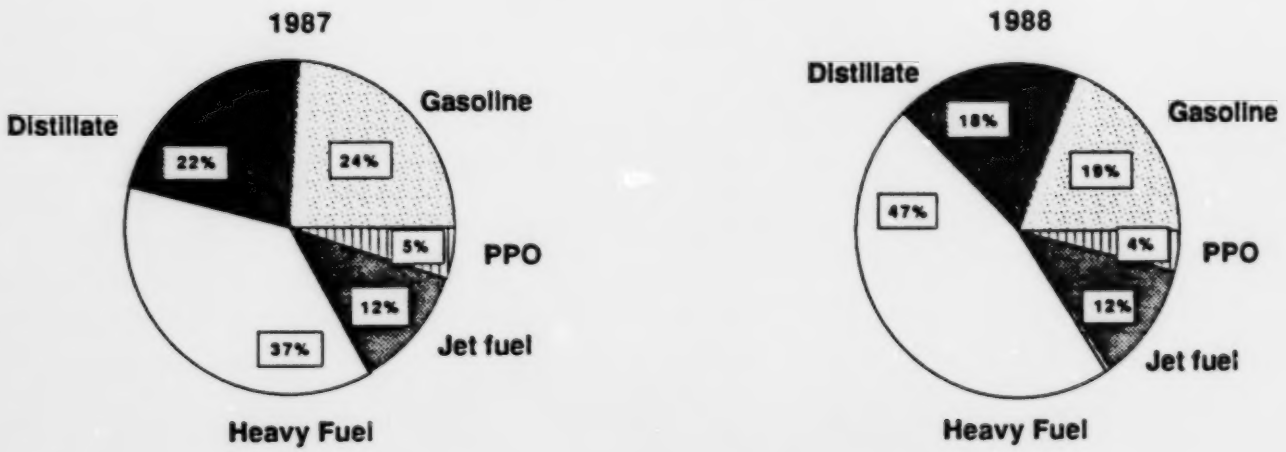
Prices

Petroleum products move from numerous Canadian locations to a variety of export markets and, consequently, compete against a wide spectrum of prices. Export revenues depend on several factors including access to markets, the quality of the product delivered and an individual exporter's particular circumstances.

One market that offers eastern Canadian exporters the highest prices is St. Pierre et Miquelon because exports are made in relatively small volumes and because it has yet to demonstrate that it has another economic source of supply. A market, like Detroit, in close proximity to the Canadian refinery centre of Sarnia may perhaps offer a higher return than a movement covering several thousands of miles such as the shipments from Vancouver to the Far East.

Figure 6

Imports of Petroleum Products
1987 versus 1988



The availability of transportation also affects what type of price an exporter may expect. Exporters on tidewater can move cargo or barge lots whereas companies in the Prairies generally move their products to the United States via tank truck. The cost of transportation has a significant impact on the amount an export sale will yield.

As one would expect, higher quality products normally return better prices. For example, unleaded gasoline obtains a premium over leaded gasoline. Low pour diesel fuel realizes higher prices than high pour heating oil as does low sulphur heavy fuel oil compared to higher sulphur fuel oil. For example, exports of .7% sulphur heavy fuel oil to Wayne County, Michigan receives better prices than 1.5% sulphur material to Buffalo.

An individual company's particular circumstances are often one of the more critical elements in export pricing. Any Prairie refiner with a continuing surplus of heavy fuel oil is too distant from heavy fuel export markets to obtain a high price for its export sales. On the other hand, an Ontario refiner capable of securing a term contract with United States' utilities for its surplus heavy fuel, can enjoy very favourable returns. Certain companies export gasoline and distillate into locations at the end of the United States distribution chain and, consequently, obtain relatively high prices. Many independent resellers deliver tank truck volumes directly to retail outlets in the United States thus receiving higher prices than companies selling through middlemen. Of course, operating problems faced by the industry such as those associated with inventory containment, refinery imbalances and refinery upsets will always be important when pricing petroleum products for the export market.

The United States is Canada's major customer and exports from Canada generally compete against product available at spot prices in that market. Spot product prices usually relate to cargo or pipeline quantities. However, in certain instances, tank truck deliveries are being made at spot related prices rather than tank wagon prices which are normally quoted on smaller quantities and are therefore generally higher. Again, this will depend on the market being served. The 'Oil Price Information Service' provides average United States spot prices for unleaded gasoline and No. 2 fuel oil and these have been used in the following price comparisons for 1987 and 1988. For heavy fuel oil, we have employed the United States East Coast spot price for 2.2 percent sulphur material as published by Oil Buyers' Guide.

Spot Product Prices in the United States

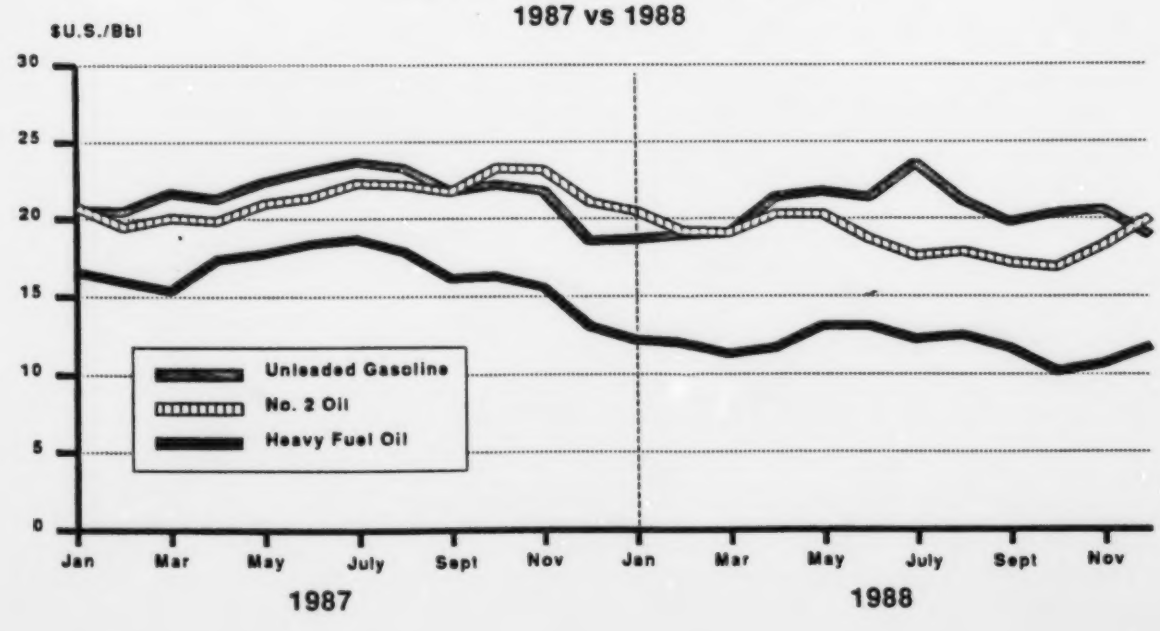
In 1987, product prices recovered significantly from their dramatic decline of over 50 percent in the early part of 1986.

The spot price for unleaded gasoline and furnace oil commenced 1987 at about $U.S. 20.50 to 20.80 per barrel while heavy fuel oil opened the year at $U.S. 16.60 a barrel (Figure 7). Following a slight decline in Febru-

Figure 7

United States Spot Product Prices

1987 vs 1988



ary, spot prices for light products rose in March and remained relatively strong into the third quarter. During the summer of 1987, demand for motor gasoline was strong, brought about by relatively low retail prices, a rise in consumers' disposable income and an increase in automobile speed limits.

The spot price for heavy fuel also rose because of fundamental market forces such as asphalt demand and air conditioning requirements. Prices fell in the late summer as sales declined and inventories continued to increase for the rest of the year.

Unleaded gasoline prices declined in September, signifying the end of the driving season, and remained relatively flat through to November. In October, heating oil inventories were roughly 25 million barrels below 1986 levels as refiners were late in switching over to maximize distillate output because of strong gasoline demand. This resulted in a firming of spot heating oil prices. After a relatively strong rally through most of 1987, spot product prices plunged to their lowest level in mid December.

Despite severe cold weather in the United States in January 1988, heating oil prices declined further because of ample supplies held by distributors. In fact, heating oil prices did not recover for the remainder of the winter season.

Heavy fuel oil prices along the United States East Coast were relatively soft during the whole of 1988 as a result of significant imports of low cost product and higher production of heavy fuel oil by Gulf Coast refiners which increased runs of heavy Middle East crudes. Prices bottomed out in October at about $U.S. 10.20 a barrel, at which time, some East Coast utilities sought out supplies of heavy fuel oil because of its competitiveness with natural gas.

Light product prices firmed during April anticipating output restrictions by OPEC producers. Gasoline prices remained fairly strong through November for a number of reasons, including increased demand, low inventories, refinery problems on the United States Gulf and West Coasts, an explosion on a North Sea platform and threat of damage from Hurricanes Florence and Gilbert.

High refinery runs in the summer and fall to meet gasoline demand caused heating oil inventories to rise thus keeping prices quite soft from June to October. In November and December, however, heating oil demand increased by eight percent over 1987 and resulted in a strengthening of spot prices.

Generally, spot prices for gasoline and heating oil cross in September or October. However, for the first time this decade, the crossover did not occur until December because gasoline demand was increasing while furnace oil demand remained essentially static. Many analysts believe that this new relationship will continue at least for the foreseeable future.

Export Prices versus United States Spot Prices

Shippers' export prices are assessed each month against relevant export markets but, for the purposes of this report, export prices for each of the main petroleum products (gasoline, middle distillate and heavy fuel oil) have been averaged to highlight the general price patterns in comparison to United States spot prices. Comparisons have not been made against import prices due to insufficient data.

Motor Gasoline

The majority of gasoline imported and exported from Canada is unleaded with the remainder consisting of both regular leaded grade and blending components.

In 1987, the export price remained relatively close to the United States spot price. The largest variance during the year occurred in September and December as the United States spot price declined as a result of high inventories and the seasonal decline in demand. The export price increased in September because of strong returns on exports from eastern Canada and British Columbia (Figure 8).

As was the case in 1987, export prices were generally quite close to United States spot prices. In July 1988, spot prices peaked at about 18 cents a litre because of refinery problems in the United States and an explosion on a North Sea platform. In addition, gasoline inventories in the United States were about 20 million barrels below the previous year, the lowest level in four years, at a time when gasoline demand was generally strong. Subsequently, the arrival of numerous cargoes of gasoline in the United States, and an end to refinery problems on the Gulf Coast and West Coast put downward pressure on spot prices.

During this period, companies in Ontario were unable to increase gasoline exports because of the tight supply created by domestic refinery problems. In the Prairies, however, exporters received attractive returns on shipments to Minnesota and North Dakota because of low inventories in those States, a situation which was compounded by a fire at a Montana refinery.

In the 3rd Quarter, spot prices for unleaded gasoline weakened due to seasonal softness but rebounded in October and November. This short term increase resulted from strong demand and temporary supply disruptions at some Gulf Coast refineries. A surge in gasoline im-

Figure 8

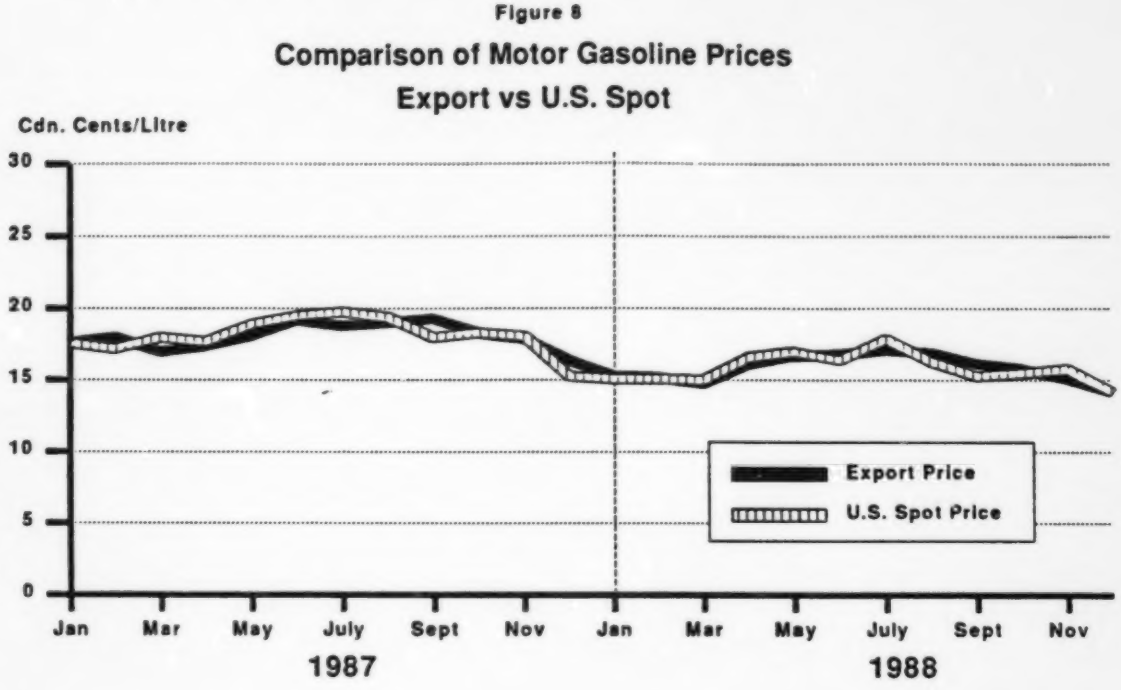
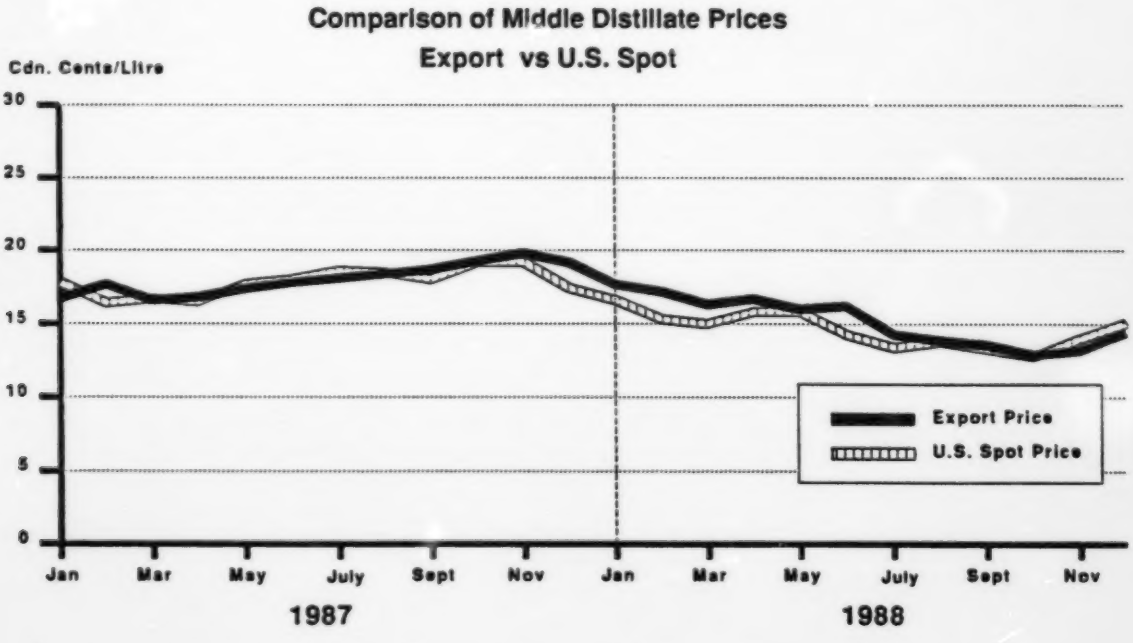


Figure 9



ports and a quick end to the Brazil refinery workers' strike soon dampened spot gasoline prices.

Export prices in eastern Canada reacted to the spot price increase but the average export price in November was held down by a large shipment from British Columbia.

Middle Distillate

Figure 9 provides a monthly comparison of the average export price to the United States spot price for furnace fuel oil.

For most months, both prices were very close which illustrates the point that Canadian companies generally

base their export prices on United States spot prices. In a few instances (e.g. first quarter 1988 and June 1988) export prices were higher which reflects a significant volume that was moved by truck to areas where prices were attractive.

Demand for heating oil in the United States during November and December 1988 was up about 8 percent over 1987 and coupled with lean inventories, spot prices rose by about 2.5 cents a litre over October's level. The November export price was lowered by large exports from western Canada where end market prices were soft. In December, prices rebounded but the November differential was maintained.

Heavy Fuel Oil

Figure 10 shows the average export price in comparison to the United States East Coast spot price.

During the first half of 1987, there was essentially a constant differential between the two prices. There are several reasons for the high spot price including low fuel inventories in the United States and Venezuela, tight supply of Western Hemisphere heavy crudes and unusually strong spot demand in the United States. In the summer months, several cargoes of heavy fuel oil were shipped from Quebec and Ontario to the United States East Coast where spot prices were relatively strong because of a seasonal heat wave. This resulted in unusually high requirements for heavy fuel oil by electric power utilities.

Heavy fuel oil spot prices remained relatively flat throughout most of 1988. Spot prices peaked in May and June at approximately 10 cents a litre and bottomed out at 8 cents per litre in October. The spot price rose gradually through November and December in response to the rise in spot gas prices occasioned by cold weather along the United States East Coast and high freight rates on cargoes coming from Europe.

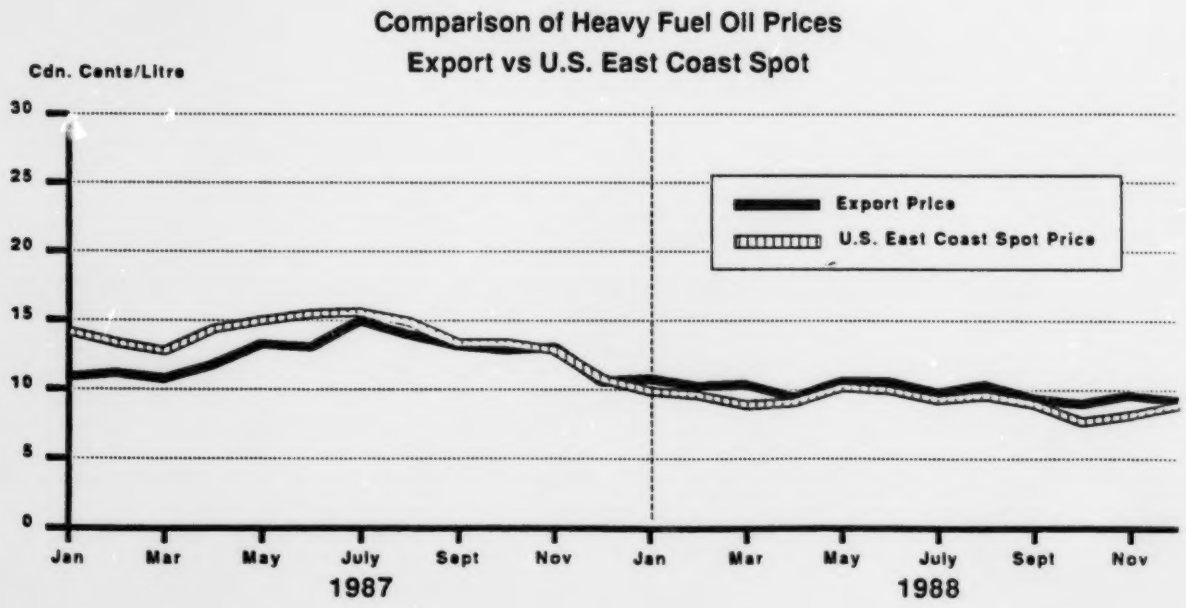
In most instances, the average export price was slightly above the spot price. In the fourth quarter, high netbacks made exports attractive from Quebec and Ontario.

Export Prices versus Rack Prices and Bulk Contract Prices For Gasolines and Distillates

Several refiners in Canada publish rack prices for large volume sales to private brand resellers and are applicable at most primary distribution terminals. Rack prices are reported net of federal sales and excise taxes and provincial sales taxes. They are reported regularly in the trade press.

During most of 1987 and all of 1988, some large buyers were reportedly obtaining discounts off rack prices. In other instances, buyers paid crude price plus processing fee for their product. Oil Buyers' Guide provides bulk contract prices in its Canadian Terminal Prices section. These prices were below the rack price during 1988. In the next two graphs, average export prices from Ontario for gasoline and middle distillate have been compared to the Toronto rack price and the Toronto bulk contract price. It should be noted that rack prices are not quoted by sellers for heavy fuel oil and aviation fuel.

Figure 10



Motor Gasoline

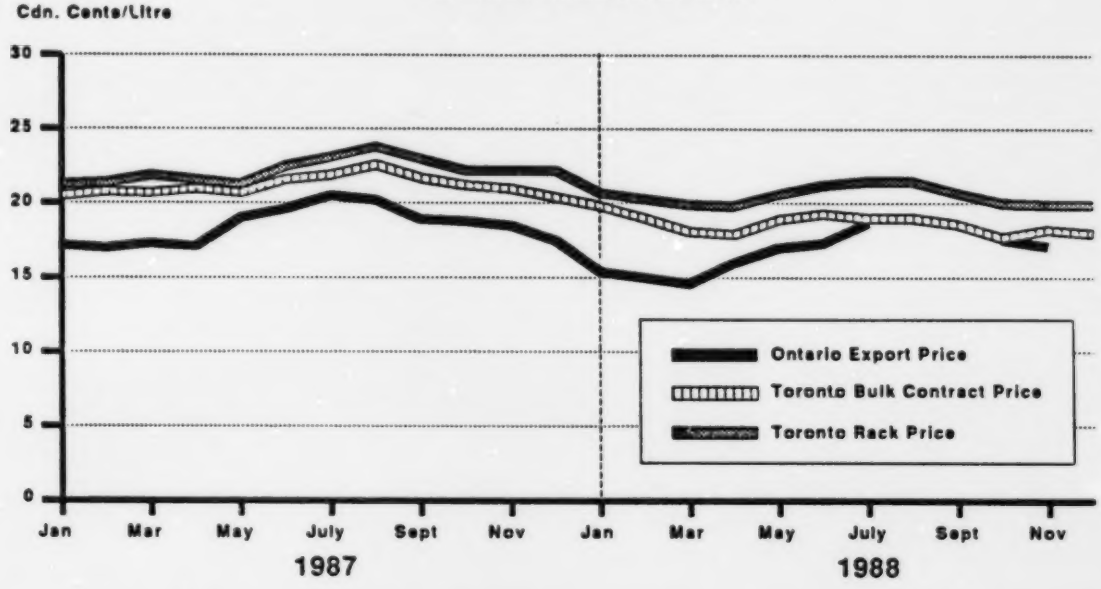
In 1987, the Ontario export price for unleaded gasoline was below the Toronto rack and Toronto bulk contract price. This trend continued through the first half of 1988. Exports were relatively low in the third quarter 1988 as inventories were tight and economics favoured imports. In addition, the number of companies exporting were minimal and, as a result, export prices cannot be released. In December 1988, only two companies exported gasoline and therefore prices cannot be shown for reasons of confidentiality (Figure 11).

Middle Distillate

With the exception of the March to May period, all prices remained relatively close during 1987 (Figure 12). In 1988, however, the export price was generally below the

Figure 11

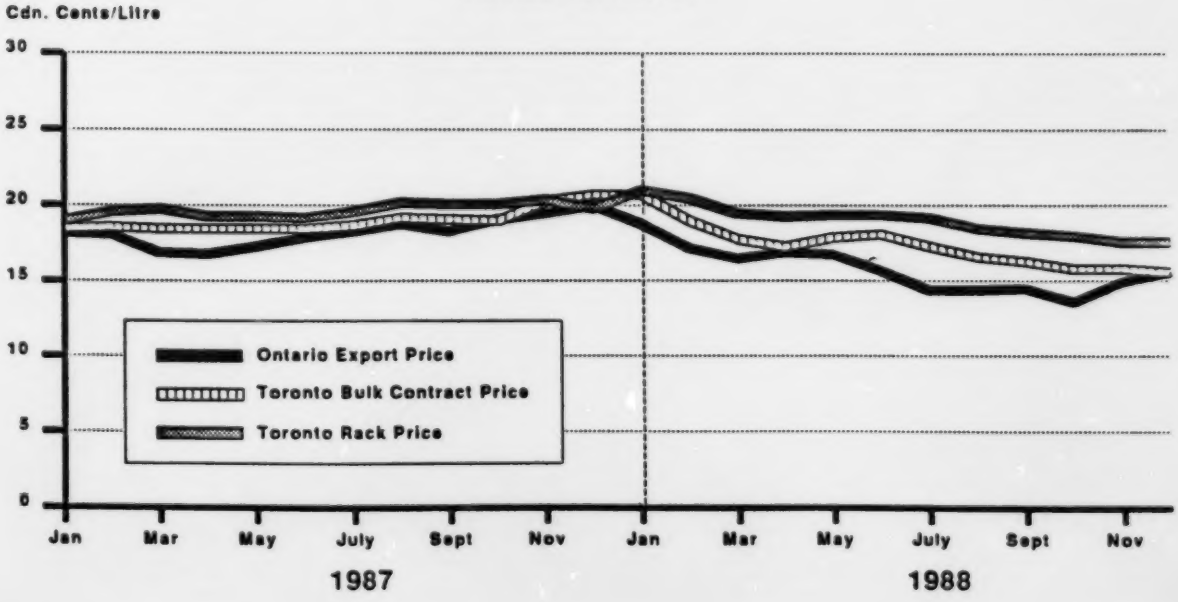
Unleaded Gasoline Prices



*August, September and December 1988 export prices cannot be released for reasons of confidentiality

Figure 12

Furnace Oil Prices



rack and bulk contract price reflecting competitive pricing by certain exporters that exported cargo lots.

Conclusions

Export and import trade in petroleum products continues to be an important and integral part of the refining industry. The two way trade inhibits Canadian prices from rising as importers take advantage of price swings. Exports occur to balance refinery yields and provide refiners with attractive short term outlets for excess supply. The range of products traded, their wide geographic distribution and the number of large and small companies involved attest to the competitive flexibility of petroleum product markets.

Some degree of concentration occurred in product export markets in 1988 as refiners increased their share of exports from 85 percent in 1987 to 91 percent in 1988. This was mainly a result of the increase in exports by Newfoundland Processing Ltd. All refiners in the country, except for Parkland, exported product in 1988.

Ontario continues to have the largest number of exporting companies, many of which also import product when price differences made it profitable. This factor tends to make southern Ontario, which has ready access to alternate supplies in the Buffalo and Detroit areas, consistently the most price competitive in Canada.

In 1988, world oil prices softened slightly in comparison with 1987. While product imports rose during the year, this was more than offset by higher exports and Canada remained a substantial net exporter of petroleum products.

The United States continues to be Canada's largest market for petroleum products. Exports in 1988 averaged 32.0 thousand cubic metres per day, an increase of 44 percent from the 1987 level of 22.2 thousand cubic metres per day. This was the largest volume exported this decade and is mainly attributable to production from the refinery in Come By Chance, Newfoundland. Each product, with the exception of aviation turbine fuel, registered an increase in export volumes.

For the most part, export prices for light petroleum products remained relatively close to spot prices in the United States. The price of motor gasoline and furnace oil exported from Ontario was generally below the Toronto rack and bulk contract prices continuing the trend established previously. The heavy fuel oil export price was slightly above the United States East Coast spot price in most months.

Petroleum product imports were 18.2 thousand cubic metres a day in 1988 compared to 16.5 thousand cubic metres a day in 1987. Imports of heavy fuel oil into Quebec and the Atlantic regions rose by 39 percent in 1988 because of industries switching from electricity and the high demand for thermal electricity generation.

The largest volume of imports again in 1988 was into Quebec. Quebec was the only region in Canada where imports were greater than exports reflecting available refinery capacity compared to product demand.

In summary, since deregulation in 1985, international trade in petroleum products has performed an increasingly important function in facilitating a smoothly operating market in Canada and from the evidence continued to do so in 1988.

EXPORTS OF PETROLEUM PRODUCTS - 1987 VERSUS 1988
(Thousands of Cubic Metres)

REGION	MOTOR GASOLINE		MIDDLE DISTILLATE[1]		AVIATION TURBINE FUEL		HEAVY FUEL OIL		PARTIALLY PROCESSED OIL		TOTAL	
	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988
Atlantic	902	2 249	1 357	2 615	201	376	274	1013	175	772	2 909	7 025
Quebec	44	111	475	345	-	-	343	307	34	-	896	763
Ontario	213	196	1 051	653	147	104	681	801	15	-	2 107	1 754
Prairies	214	255	363	412	149	162	79	66	-	-	805	895
British Columbia	598	555	324	413	441	205	17	70	11	21	1 391	1 264
TOTAL	1 971	3 366	3 570	4 438	938	847	1 394	2 257	235	793	8 108	11 701
TOTAL ($10^3m^3/d$)	5.4	9.2	9.8	12.1	2.6	2.3	3.8	6.2	0.6	2.2	22.2	32.0

IMPORTS OF PETROLEUM PRODUCTS - 1987 VERSUS 1988
(Thousands of Cubic Metres)

REGION	MOTOR GASOLINE		MIDDLE DISTILLATE[1]		AVIATION TURBINE FUEL		HEAVY FUEL OIL		PARTIALLY PROCESSED OIL		TOTAL	
	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988	1987	1988
Atlantic	144	73	366	317	64	231	1 842	2 064	-	-	2 416	2 685
Quebec	1 112	874	891	755	469	377	177	750	302	246	2 951	3 002
Ontario	186	207	21	66	128	129	2	34	17	29	354	465
Prairies	7	7	-	-	-	-	-	-	-	-	7	7
British Columbia	19	128	32	73	86	33	145	250	-	-	282	484
TOTAL	1 468	1 289	1 310	1 211	747	770	2 166	3 098	319	275	6 010	6 643
TOTAL ($10^3m^3/d$)	4.0	3.5	3.6	3.3	2.0	2.1	5.9	8.5	0.9	0.8	16.5	18.2
NET EXPORTS/ (IMPORTS)	1.4	5.7	6.2	8.8	0.6	0.2	(2.1)	(2.3)	(0.3)	(1.4)	5.7	13.8

[1]Includes stove oil, furnace oil and diesel.